5113454/02

BAXI FIRES DIVISION

INSTALLER GUIDE

Model 754

INSET LIVE FUEL EFFECT GAS FIRE

Fitted with

Artura fascia

CE

(GC No. 32-032-59)

THIS APPLIANCE IS FOR USE WITH NATURAL GAS (G20).
THIS APPLIANCE IS SUITABLE ONLY FOR INSTALLATION IN THE UNITED KINGDOM (GB) AND THE REPUBLIC OF IRELAND (IE).

We trust that this guide gives sufficient details to enable this appliance to be installed and maintained satisfactorily. However, if further information is required, our **Baxi Fires Division Technical Helpline** will be pleased to help.
Telephone **08706 061 065** (National call rates apply in the United Kingdom)
In the Republic of Ireland telephone **0044 8706 061 065.**

BAXI • VALOR • WONDERFIRE

INSTALLER: Please leave this guide with the owner

© Baxi Heating U.K. Ltd.

Safety First.

Baxi Fires Division fires are CE Approved and designed to meet the appropriate British Standards and Safety Marks.

Quality and Excellence.

At the heart of every Baxi Fires Division fire.

All Baxi Fires Division fires are manufactured to the highest standards of quality and excellence and are manufactured under a BS EN ISO 9001 quality system accepted by the British Standards Institute.

The Highest Standards

Baxi Fires Division is a member of the Society of British Gas Industries which works to ensure high standards of safety, quality and performance.

Careful Installation

Baxi Fires Division is a CORGI registered company. All our gas fires must be installed by a competent CORGI Registered Installer in accordance with our Installer Guide and should not be fitted directly on to a carpet or floor of combustible material.

BAXI FIRES DIVISION

Baxi Fires Division, Erdington, Birmingham B24 9QP
www.firesandstoves.co.uk

Because our policy is one of constant development and improvement, details may vary slightly from those given in this publication

INSTALLER GUIDE

CONTENTS

Section	Heading	Page
1.	**SAFETY**	**4**
2.	**APPLIANCE DATA**	**4**
3.	**GENERAL INSTALLATION REQUIREMENTS**	**5**
4.	**PACK CONTENTS**	**12**
5.	**FIREPLACE CHECK**	**13**
6.	**IGNITION CHECK**	**14**
7.	**GAS SUPPLY CONNECTION**	**15**
8.	**PREPARING APPLIANCE FOR INSTALLATION**	**15**
9.	**HOTBOX INSTALLATION**	**18**
9.1	Cable retention and floor fixing.	18
9.2	Sealing floor front - all installations.	20
10.	**BURNER & SUPPLY PIPE INSTALLATION**	**20**
10.1	Fitting the burner.	20
10.2	Supply pipe installation.	20
10.3	Preliminary burner checks.	20
10.4	Check inlet pressure.	21
11.	**FASCIA INSTALLATION**	**22**
12.	**FITTING THE CERAMIC FUEL EFFECT**	**22**
13.	**FULL OPERATING CHECKS**	**22**
14.	**FINAL REVIEW**	**25**
15.	**SERVICING & PARTS REPLACEMENT**	**26**
15.1	To remove the fascia.	26
15.2	To remove the burner unit.	27
15.3	To remove the pilot unit.	27
15.4	To remove the gas valve.	27
15.5	To remove the piezo generator.	28
15.6	To grease the control tap.	28
15.7	To replace the burner.	28
15.8	To remove the main burner injector.	29
15.9	To remove the appliance from the fireplace.	29

INSTALLER GUIDE

1. SAFETY

Installer

Before continuing any further with the installation of this appliance please read the following guide to manual handling:

- The lifting weight of this appliance is as below:

Heat engine(kg)	Casting (kg)	Fascia	Total
6.80	3.84	3.00	13.64

- One person should be sufficient to lift the fire. If for any reason this weight is considered too heavy then obtain assistance.
- When lifting always keep your back straight. Bend your legs and not your back.
- Avoid twisting at the waist. It is better to reposition your feet.
- Avoid upper body/top heavy bending. Do not lean forward or sideways whilst handling the fire.
- Always grip with the palm of the hand. Do not use the tips of fingers for support.
- Always keep the fire as close to the body as possible. This will minimise the cantilever action.
- Use gloves to provide additional grip.
- Always use assistance if required.

2. APPLIANCE DATA

This product uses fuel effect pieces containing Refractory Ceramic Fibres (RCF), which are man-made vitreous silicate fibres. Excessive exposure to these materials may cause irritation to eyes, skin and respiratory tract. Consequently, it is important to take care when handling these articles to ensure that the release of dust is kept to a minimum. To ensure that the release of fibres from these RCF articles is kept to a minimum, during installation and servicing we recommend that you use a HEPA filtered vacuum to remove any dust and soot accumulated in and around the fire before and after working on the fire. When replacing these articles we recommend that the replaced items are not broken up, but are sealed within a heavy duty polythene bag, clearly labelled as RCF waste. This is not classified as "hazardous waste" and may be disposed of at a tipping site licensed for the disposal of industrial waste. Protective clothing is not required when handling these articles, but we recommend you follow the normal hygiene rules of not smoking, eating or drinking in the work area and always wash your hands before eating or drinking.

Gas	Natural (G20)
Inlet Pressure	20mbar
Input Max. (Gross)	5.1kW (17,400 Btu/h)
Input Min. (Gross)	3.0kW (10,236 Btu/h)
Inlet Test Pressure (Cold)	20.0 ± 1.0mbar (8.0 ± 0.4in w.g.)
Gas Connection	8mm pipe
Burner Injector	Stereomatic Cat. 82 Size 065
Pilot & Atmosphere Sensing Device	Copreci Ref. O.D.S 21500/166
Ignition	Integral piezo (Mounted on gas valve)
Aeration	Non-adjustable

This appliance does not contain any component manufactured from asbestos or asbestos related products.

The appliance data label is located on a plate at the base of the fire. This can be seen by lifting the bottom front cover of the fascia.

3. GENERAL INSTALLATION REQUIREMENTS

3.1 The installation must be in accordance with these instructions.
For the user's protection, in the United Kingdom it is the law that all gas appliances are installed by competent persons in accordance with the current edition of the Gas Safety (Installation and Use) Regulations. Failure to install the appliance correctly could lead to prosecution. The Council for the Registration of Gas Installers (CORGI) requires its members to work to recognised standards.
In the United Kingdom the installation must also be in accordance with:
All the relevant parts of local regulations.
All relevant codes of practice.
The relevant parts of the current editions of the following British Standards:-

BS 715	BS 1251	BS 1289 Part 1	BS 1289 Part 2
BS EN 1806	BS 4543 Part 2	BS 5440 Part 1	BS 5440 Part 2
BS 5871 Part 2	BS 6461 Part 1	BS 6891	BS 8303

In England and Wales, the current edition of the Building Regulations issued by the Department of the Environment and the Welsh Office
In Scotland, the current edition of the Building Standards (Scotland) Regulations issued by the Scottish Executive.
In Northern Ireland, the current edition of the Building regulations (Northern Ireland) issued by the Department of
the Environment for Northern Ireland.

In the republic of Ireland the installation must also conform to the relevant parts of:

a) The current edition of IS 813 “Domestic gas installations”

b) All relevant national and local rules in force.

Where no specific instructions are given, reference should be made to the relevant British Standard Code of Practice.

3.2 In the United Kingdom, as supplied, the appliance can be installed in the following situations: -

3.2.1 To a fireplace complete with surround and hearth as shown in figure 1 and complying with BS1251 after removal of the fireback and sufficient material behind the fireback for a debris catchment space. The required fireplace, hearth, debris catchment area and clearance dimensions are shown in figure 1.

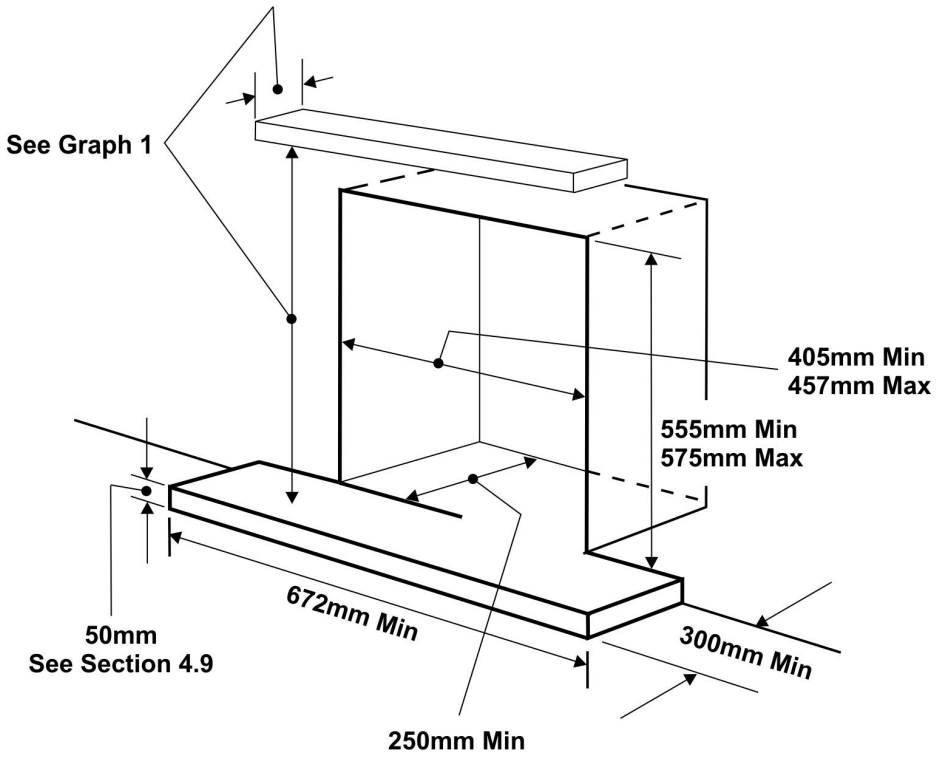


Figure 1. Hearth and fireplace opening dimensions

3.2.2 ‘Hole-in-the-wall’ installations.

It is recommended that a hearth should be installed as in figure 1. If a hearth is not fitted, the fire must be installed so that the distance from the base of the fireplace opening in the wall to the finished floor level is at least 85mm. The minimum shelf height will have to be taken from the base of the fireplace opening.

3.2.3 To a fireplace incorporating a metal flue box complying with the constructional requirements of the current edition of BS715. The

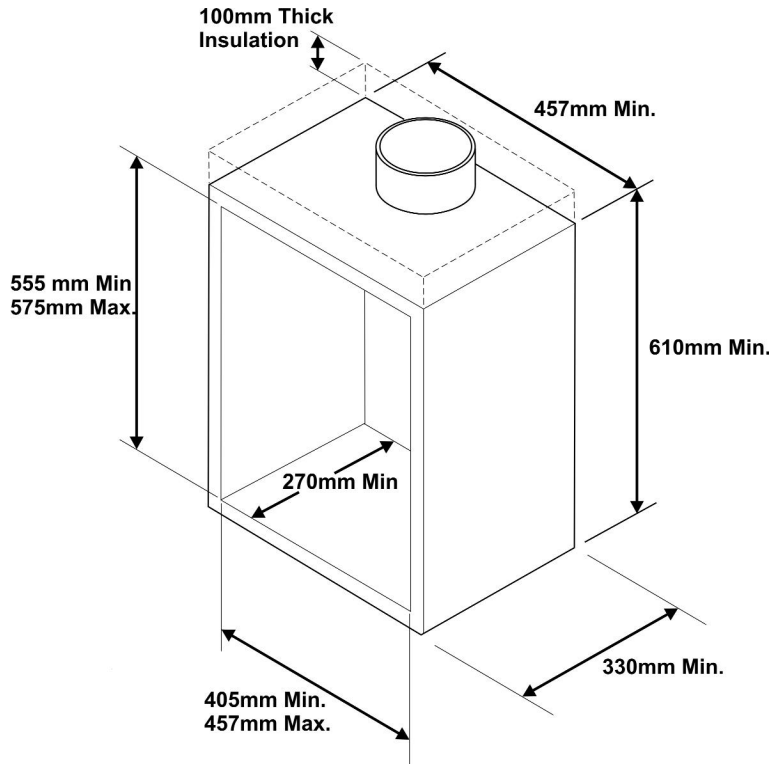
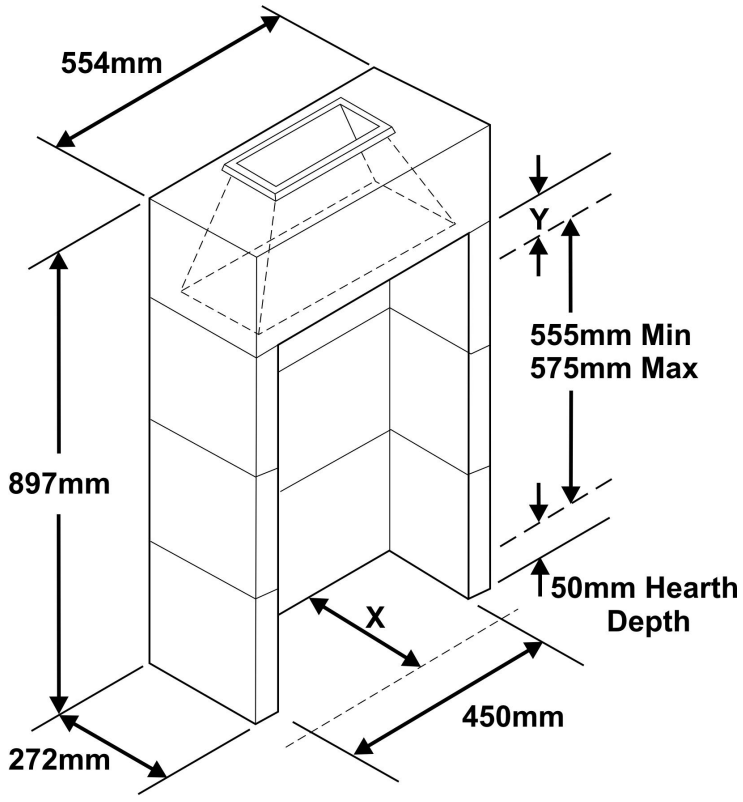


Figure 2. Metal flue box

dimensions of the flue box must conform to those shown in figure 2.

3.2.4 A precast concrete or clay flue block system conforming to BS1289 or BS EN 1806 with dimensions as in figure 3. The current versions of BS1289 and BS EN 1806 recommend that there should be an air space or insulation between the flue blocks and the plaster because heat transfer may cause cracking on directly plastered flues. However, generally this appliance is suitable for installations under all circumstances unless there is a history of cracking problems. Remember that faults such as cracking may be caused by poorly built and restrictive flues, e.g. mortar extrusions, too many bends, flue heights below three metres, restrictive terminations etc (See figure3).



Dimension 'X' to be 205mm minimum. A larger starter block depth of 220mm will be required.
Dimension 'Y' to be made up with suitable non-combustible building material.
The standard opening height is 675mm.

Figure 3. Precast or clay flue block system dimensions

3.2.5 If the fireplace opening is greater than the acceptable dimensions given in this guide, do not use the back of a fire surround or marble to reduce the opening. This may cause cracking of the surround back or marble.

3.3 Suitable flues and minimum flue sizes are as follows: -
It should be noted that, as with many appliances, sharp bends or horizontal runs in metal flues at the top of the system can be a cause of problems in these types of installation.

- 225mm x 225mm conventional brick flue.
- 175mm diameter lined brick or stone flue.
- 200mm diameter factory made insulated flue manufactured to BS4543.
- 175mm diameter flue pipe. See BS6461 Part 1 for suitable materials.
- Single wall, twin wall or flexible flue liner with a minimum diameter of 125mm.

The materials to be used are stainless steel or aluminium as specified in BS715. The liner must be sealed to the surrounding area above the fireplace opening and to the top of the chimney. An approved terminal must be fitted.

- A properly constructed precast concrete or clay flue system conforming to BS1289 or BS EN 1806. This system is only suitable if the conditions stated in section 3.2.4 are

met.

3.4 The flue must conform to BS 5440: Part 1 in design and installation.
The flue, measured from the bottom of the fireplace opening to the bottom of the terminal, shall be not less than 3m in actual vertical height. When calculated in accordance with BS 5440: Part 1 Annex A, the minimum **equivalent** height of the flue shall be 2.0m of 125mm-dia. flue pipe.

3.5 The flue must not be used for any other appliance or application.

3.6 Any chimney damper or restrictor should be removed. If removal is not possible, they must be secured in the open position.

3.7 If the appliance is intended to be installed to a chimney that was previously used for solid fuel, the flue must be swept clean prior to installation. All flues should be inspected for soundness and freedom from blockages.

3.8 If the fireplace opening is an underfloor draught type, it must be sealed to stop any draughts.

3.9 The appliance must be mounted behind a non-combustible hearth (N.B. conglomerate marble hearths are considered as non-combustible). The appliance can be fitted to a purpose made proprietary class “O”-150°C surround. The hearth material must be at least 12mm thick. The periphery of the hearth (or fender) should be at least 50mm above floor level to discourage the placing of carpets or rugs over it.
The surface of the hearth must be sufficiently flat to enable the bottom of the fascia and the bottom front cover to be aligned horizontally. Any excessive unevenness (uneven tiles, Cotswold stone, etc.) should be rectified.
The appliance must not stand on combustible materials or carpets**.**

3.10 The front face of the fireplace should be reasonably flat over the area covered by the hotbox top and side flange seals to ensure good sealing. These faces should be made good if necessary.
The fireplace floor should be reasonably flat to ensure that a good seal with the hotbox can be made.

3.11 Note that soft wall coverings (e.g. embossed vinyl, etc.) are easily affected by heat. They may scorch or become discoloured when close to a heating appliance. Please bear this in mind when installing.

3.12 This appliance must not be installed in any room that contains a bath or shower or where steam is regularly present.

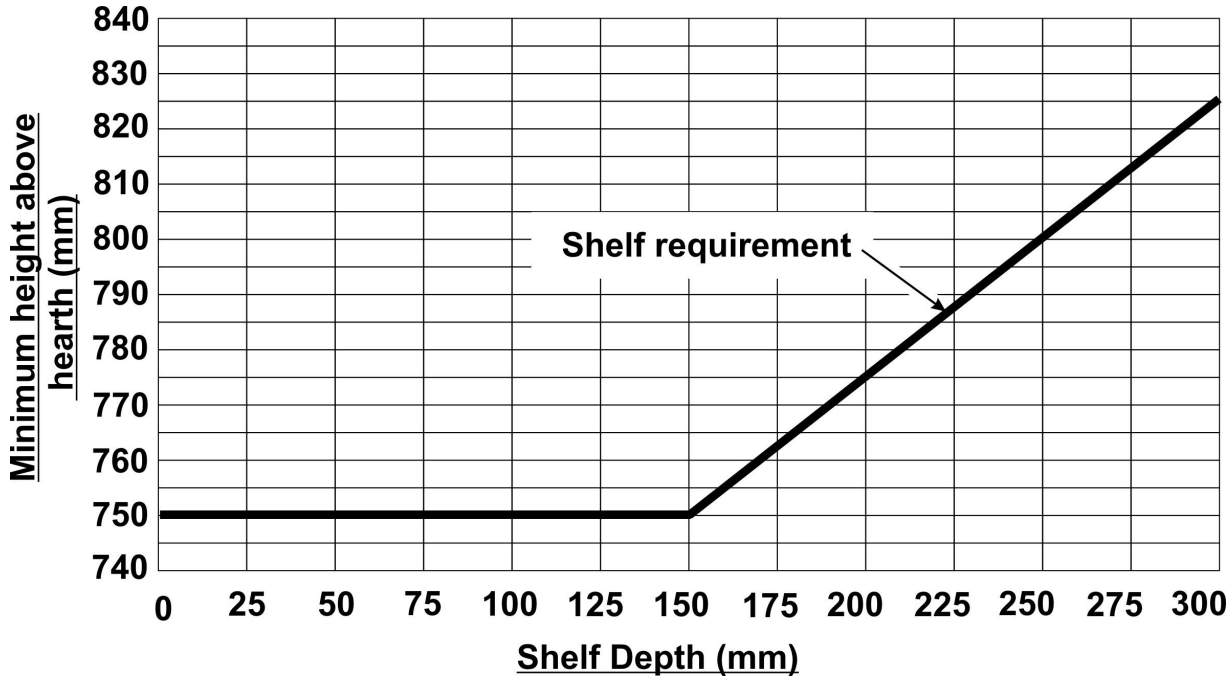
3.13 An extractor fan may only be used in the same room as this appliance, or in any

area from which ventilation for the appliance is taken, if it does not affect the safe performance of the appliance. Note the spillage test requirements detailed further on in this manual. If the fan is likely to affect the appliance, the appliance must not be installed unless the fan is permanently disconnected.

3.14 Normal adventitious ventilation is usually sufficient to satisfy the ventilation requirements of this appliance. In GB reference should be made to BS 5871 Part 2 and in IE reference should be made to the current edition of IS 813 “Domestic Gas Installations” which makes clear the conditions that must be met to demonstrate that sufficient ventilation is available.

3.15 The minimum height from the top surface of the hearth to the underside of any shelf made from wood or other combustible materials is shown below: -

- *For a shelf up to 150mm deep*
  Minimum height = 750mm.
- *For a shelf deeper than 150mm*
  Minimum height = 750mm + 12.5mm for every 25mm depth over 150mm. (See graph 1).



Graph 1. Combustible shelf clearances

3.16 If the appliance is to be fitted against a wall with combustible cladding, the cladding must be removed from the area covered by the fascia. The cladding must also not touch the fascia (See figure 4). We suggest that the actual fascia is used as a template to mark the area for combustible cladding removal and that this area is increased by at least 2mm all round. If the cladding projects forward from the fixing plane of the fire the clearance at the top of the appliance must be increased to a minimum 15mm.This will allow for fascia removal.

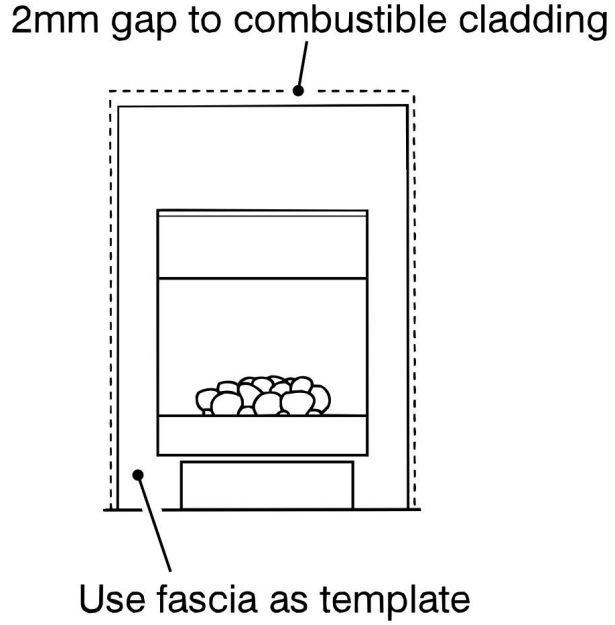


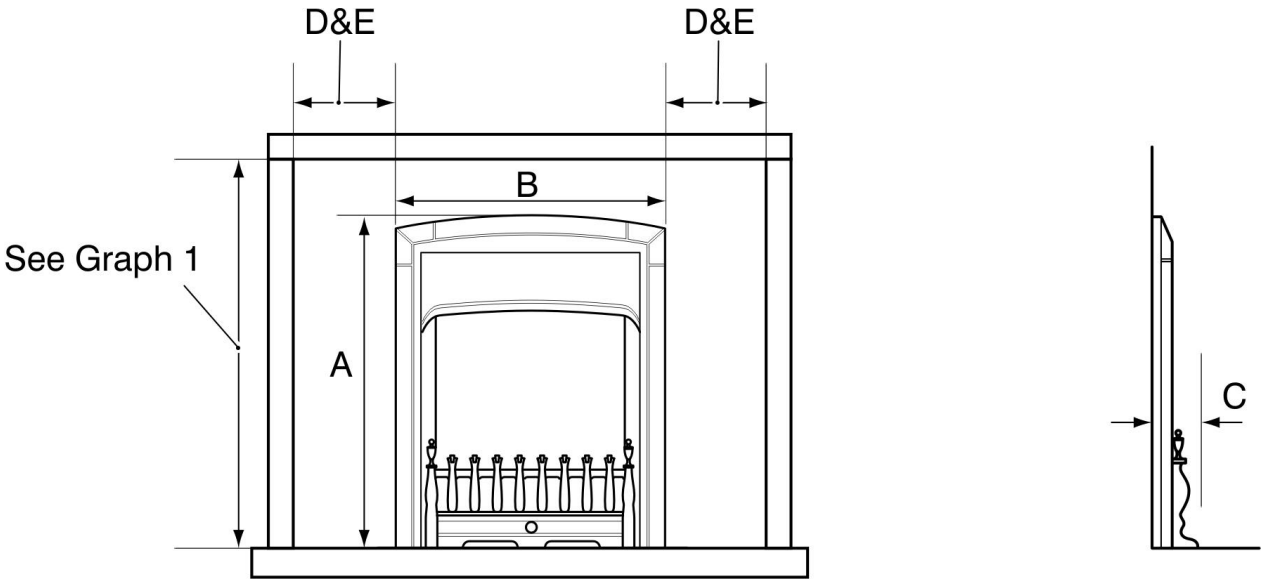
Figure 4. Removal of combustible cladding

3.17 The minimum allowable distance from the outside of the appliance fascia to a corner wall having combustible material or any other combustible surface which projects beyond the front of the appliance is shown in figure 5.

3.18 Proprietary terminals must comply with BS 715 or BS 1289. Any terminal or termination must be positioned in accordance with BS 5440 Part 1 to ensure that the products of combustion can be safely dispersed into the outside atmosphere. Where the appliance is connected to an unlined brick chimney it is generally unnecessary for the chimney pot to be replaced or for a terminal to be fitted unless the flue has a diameter smaller than 170mm.

3.19 The appliance is fitted with an A.S.D (Atmosphere sensing device). If the appliance closes down after a period of operation for no apparent reason, the consumer should be informed to stop using the appliance until the installation and appliance have been thoroughly checked. The A.S.D will shut the appliance down if an unacceptable amount of harmful products of combustion accumulate. Under no circumstances should the A.S.D be altered or bypassed in any way. Only a genuine manufacturers replacement part should be fitted. The individual A.S.D components are not replaceable.

3.20 A fireguard complying with BS 8423 should be fitted for the protection of young children, the elderly, or the infirm.



Key	Description	Dimension (mm)
A	Appliance height	702
B	Appliance width	594
C	Appliance depth into room	100
D	Minimum **mandatory** clearance to **combustible** surfaces projecting beyond the front of appliance.	10
E	**Recommended** clearance to **non-combustible** surfaces for access purposes.	10

Figure 5. Appliance dimensions and clearances (Fascia may differ from that shown)

4. PACK CONTENTS

(See figure 6).

1 Burner & Hotbox Unit
1 Nut & olive for 8mm inlet pipe
1 Inlet ‘T’ Connector
1 Flue restrictor plate
2 Screws (For flue restrictor)
2 Fireback spacing brackets
2 Screws (For Fireback spacing brackets)
1 Ceramic fuel effect pack (Not shown)
1 Strip of floor sealing tape.
6 Fibre plugs
2 Woodscrews
2 Fire retaining cables
2 Cable clamps
4 Eyebolts
1 Rubber grommet
1 Smoke match tube
1 Length of self adhesive foam seal
1 Literature pack
1 Fascia
1 Fascia casting
1 Spacer frame (This is supplied as three separate pieces and 2 screws)
6 Edge clips (For securing spacer frame to hotbox).

Carefully remove all the contents. Take special care in handling the ceramic fuel effects. Check that all the listed parts are present and in good condition. The pack may contain additional components to that stated above. These can be discarded.

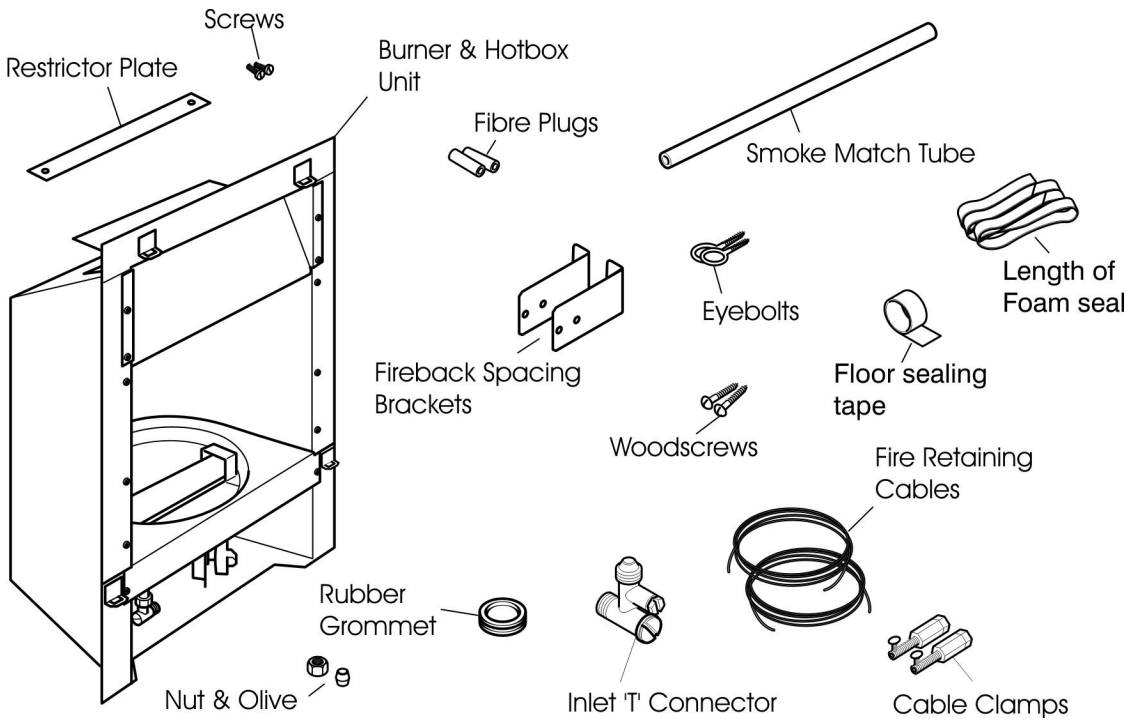


Figure 6. Pack contents

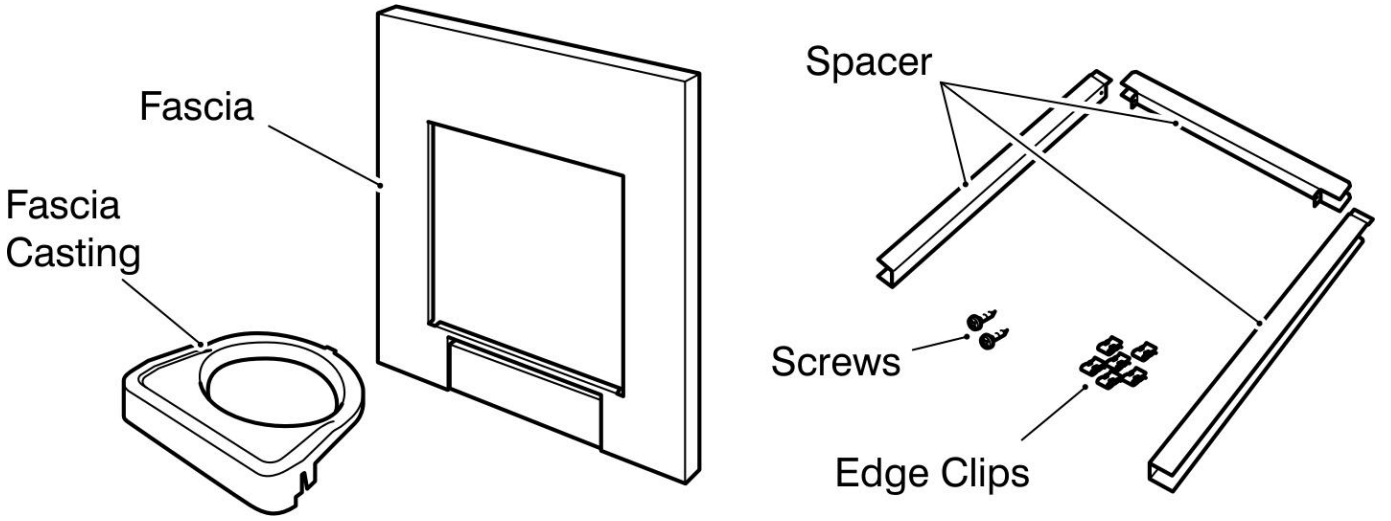


Figure 6. Pack contents continued

5. FIREPLACE CHECK

5.1 Fireplace check.

5.1.1 Fireplace size

The fireplace must comply with the requirements described in section 3.2. This will probably entail removing the fireback and infill material behind the fireback. The debris catchment area shown in figure 7 must be kept clear of obstructions.

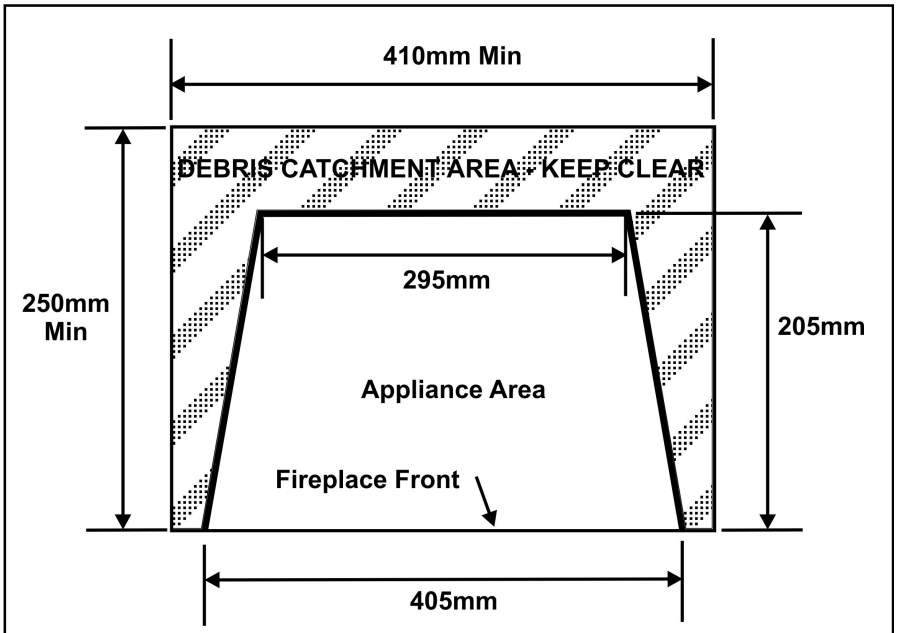


Figure 7. Fireplace area

5.1.2 Fireplace general condition

The fireplace floor should be reasonably flat to ensure that the hotbox can be installed without it rocking and so that a good seal can be made at the bottom front of the box. The front face of the fireplace should be reasonably flat over the area covered by the hotbox top and side flange seals to ensure good sealing. These faces should be made good if necessary. If the appliance is to be fitted against a wall with combustible cladding, the cladding must be removed from the area covered by the fascia. The cladding must also not touch the fascia (See figure 4). We suggest that the actual fascia is used as a template to mark the area for combustible cladding removal and that this area is increased by at least 2mm all round.

5.1.3 Soundness for appliance attachment

A primary method of retaining the appliance is provided. This involves using concealed tension cables fixed to the rear of the fireplace opening together with secondary fixing to the fireplace floor. This method is detailed in section 10 of this manual. This method is particularly useful for instances where drilling holes in the front surface of the fireplace surround is unacceptable to the customer or otherwise impractical. *N.B. It is unwise to attempt to drill into marble without the proper tools and equipment.*

Make sure that the areas at the back and towards the centre of the fireplace floor are sound enough to take the eyebolts and screws. If these areas have deteriorated due to prolonged use, they should be made sound with a suitable cement.

5.1.4 Installations using a metal flue box

The whole of the top surface of the metal flue box must be covered with a 100mm layer of mineral wool or equivalent insulation (See figure 2).

5.2 Fireplace flue pull.

Close all doors and windows in the room in which the appliance is to be installed. After confirming with a match that smoke is drawn into the flue, light a 13 gram smoke pellet and check that there is a definite flow through the flue. Verify outside that the smoke exits from one terminal only and that the termination is suitable. Observe where possible, upstairs rooms and loft spaces for signs of escaping smoke indicating a defective flue. If there is not a definite flow warm the flue for a few minutes and repeat the smoke pellet test. If there is still no definite flow the flue may need remedial work – **Do not fit the appliance until there is a definite flow through the flue.**

6. IGNITION CHECK

Before attempting to install, it is worth checking that the ignition system performs satisfactorily.

Set the control knob to the off position.

Depress the control knob and rotate it anticlockwise to the pilot ignition position. A 'click' will be heard as the integral piezo operates. A spark should be seen between the electrode and pilot tip. If there is no spark check the following: -

- Ensure that the electrode lead is connected to the terminal at the base of the electrode.
- If the above is correct, check for damage to the electrode lead.

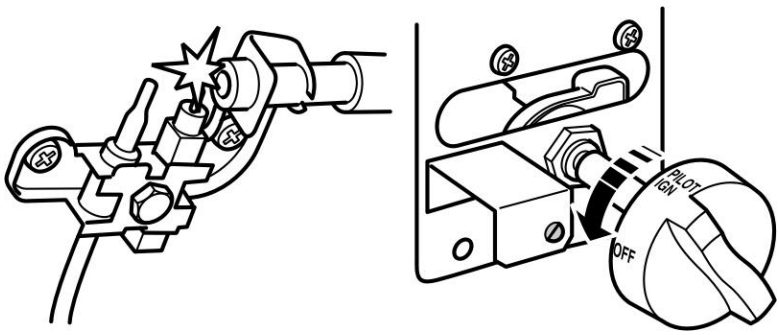


Figure 8. Ignition operation

7. GAS SUPPLY CONNECTION

A nut and olive are provided for an 8mm pipe inlet connection to the ‘T’ connector at the bottom front of the appliance. The ‘T’ connector can be rotated to allow a connection from any direction. The ‘T’ connector includes a valve for isolating the gas supply and a pressure test point.
The supply pipe must be rigid material. Flexible pipe must not be used.

Concealed supply pipe connection.

If a concealed connection from inside the fireplace is required then, **before the appliance is fitted into the fireplace** it will be necessary to extend the supply line so that it will project through the hole in the back of the hotbox and run to the ‘T’ connector at the front. The pipe run from the supply line up to the rear opening in the hotbox must be kept away from the area which will be taken by the hotbox when it is installed. Note that the centre of the appliance inlet ‘T’ connector is 25mm above the fireplace floor. The inlet ‘T’ connector should be fitted to the supply pipe at this stage.

8. PREPARING APPLIANCE FOR INSTALLATION

1. Remove the two screws to the side of the burner unit.
2. Detach the burner unit from the hotbox by lifting clear.
3. **It is important that the grommet supplied in the loose parts pack is fitted to the hole in the rear of the convection box.**
4. <u>For concealed connection only</u>: Pierce the grommet to allow the pipe to pass through it. The grommet should envelop the pipe. If the hole is larger than the pipe, seal it with tape. **Do not pierce the grommet unless the supply pipe is to pass through it.**
5. The appliance is supplied with two fireback spacers. ***Do not fit the fireback spacers if the fire is to be installed into a precast or clay flue block system as in section 3.2.4***. These should extend backwards to ensure sufficient clearance from the back of the fireplace. Remove the label and retaining screws from the rear sides of the hotbox. Position the fireback spacer as shown in figure 9. Secure the fireback spacers using the screws removed previously and the two supplied with the fire.
6. This appliance is supplied with a flue restrictor for use where the flue draught is excessive. The restrictor must NOT be fitted where a precast flue or a flue liner is used. For all other installations the restrictor should be fitted. There may however, be certain exceptional circumstances

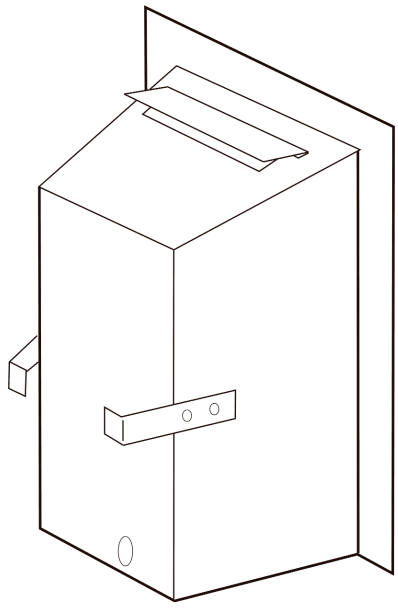


Figure 9. Fireback spacers

where fitting the restrictor causes the fire to fail the spillage test. In such cases the restrictor will have to be removed. After removal conduct the spillage check again.
The restrictor is packed loose with the appliance and is fixed with two screws (See figure 10).

7. Supplied with the fire is a spacer frame. This is made up of three separate pieces, a top and two sides. The three pieces are identified in figure 11.

8. The sides have a stepped top face. These must be located on the inside the top piece (See point 1 of figure 12). The tabs on the top piece must locate on the inside of the side pieces (See point 2 of figure 12). Secure the two side pieces to the top piece using two self tapping screws supplied. Locate the screws from inside the 'U' channel.

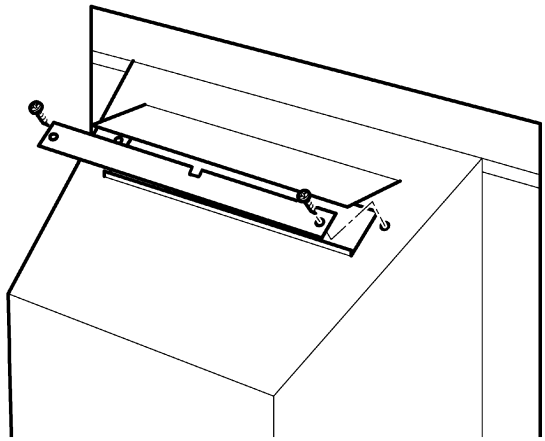


Figure 10. Flue restrictor

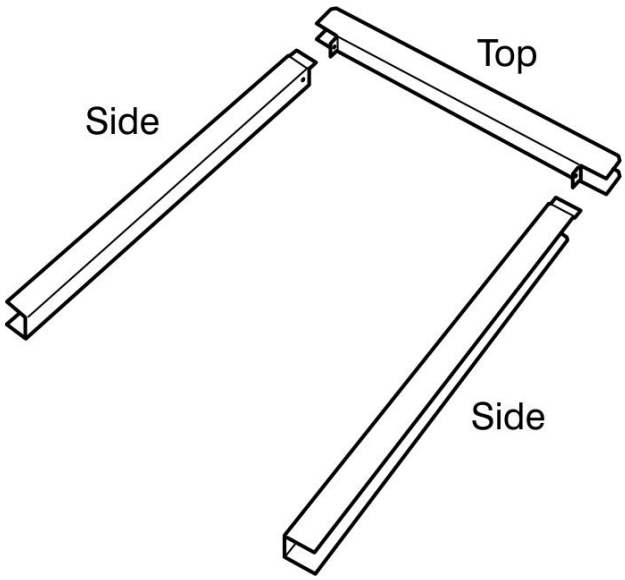


Figure 11. Assembling the spacer frame

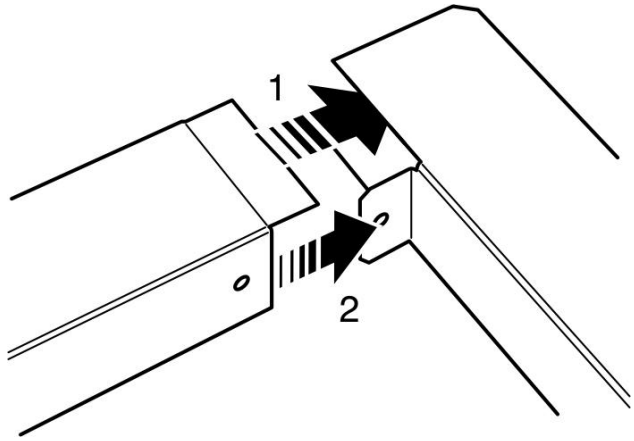


Figure 12. Fitting the foam seal

9. There is a length of self adhesive foam seal supplied with the fire. This will need to be fitted to the outer rear edges of the side and top pieces of the spacer frame. Ensure that there is no gap between the foam seals where they meet at the top flange (See figure 13).
10. Locate the spacer frame to the rear of the hotbox **(The foam seal must be to the rear of the spacer frame and NOT against the flanges of the hotbox)**. Secure the spacer frame to the hotbox using the six edge clips supplied. Position these as in figure 14.

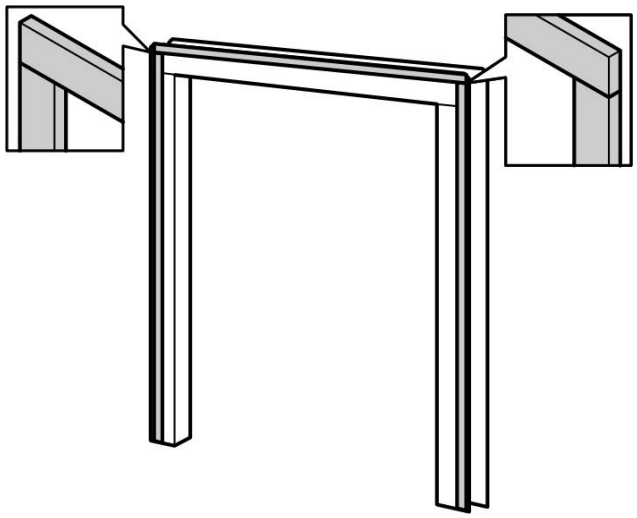


Figure 13. Fitting the foam seal

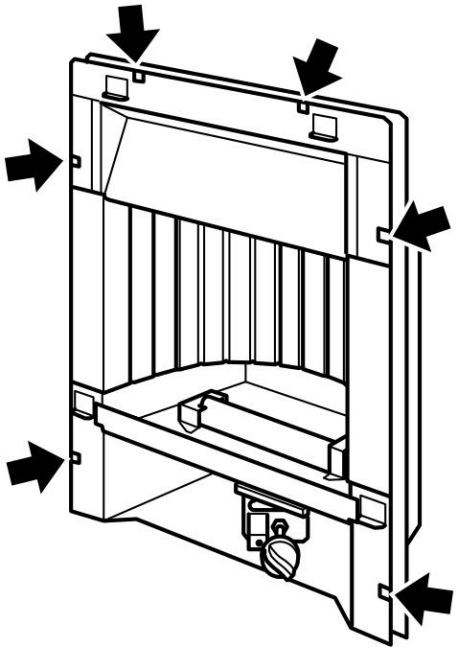


Figure 14. Fitting the edge clips

9. HOTBOX INSTALLATION

9.1 Cable retention and floor fixing.

1. Make sure that the relevant areas at the fireplace back or floor are sound enough to take the eyebolts and screws. If these areas have deteriorated due to prolonged use they should be made sound with a suitable cement.

2. Drill four holes in the rear wall of the fireplace for the fibre plugs. The holes should be drilled within the range of positions shown in figure 15 using a no.12 masonry drill. The holes should be equidistant each side of the centre line of the fireplace to ensure that the appliance finishes centrally in the opening when tension is applied to the cables.

3. Insert a fibre plug into each hole. Use the fibre plugs supplied with this appliance - **Never use plastic plugs instead of the fibre plugs supplied.** Screw the eyebolts into the plugs. Make sure that the bolts are secure.

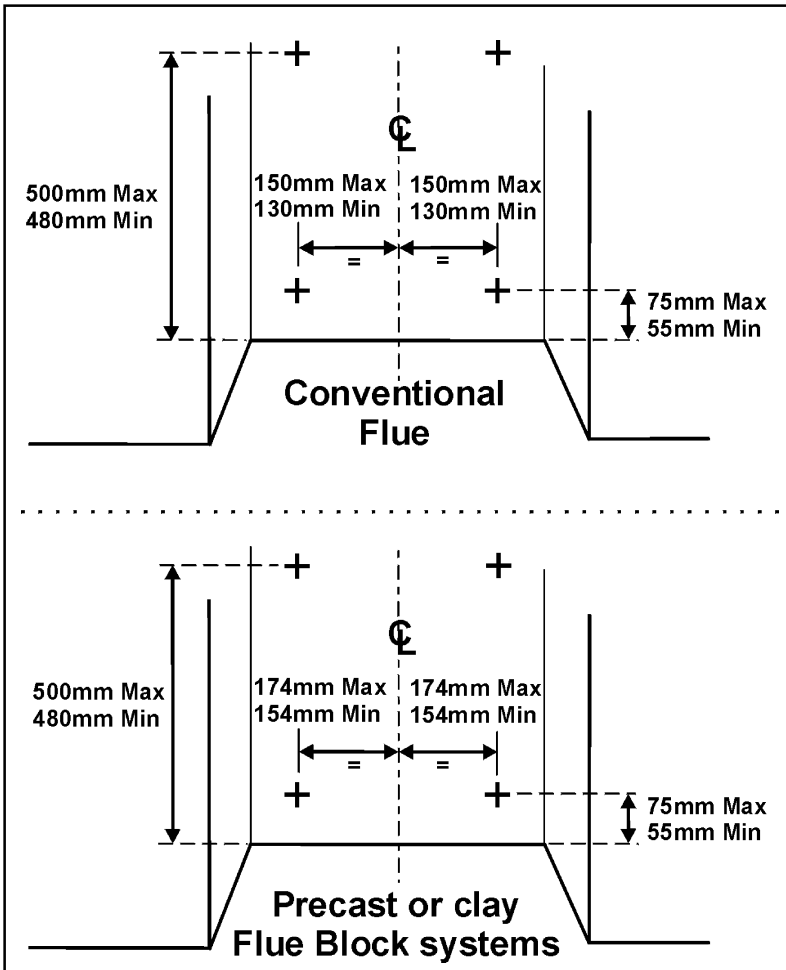


Figure 15. Eyebolt positions

4. Place the hotbox unit close to the fireplace but allow sufficient access into the fireplace opening so that the cables can be threaded through the eyebolts and returned through the back of the hotbox. If a concealed connection is being used, insert the hotbox into the fireplace feeding the supply pipe through the pierced hole in the rear grommet.

5. The hotbox has two holes at each side of the spillage plate. Insert one end of each cable (one cable each side) from the back through the lower of the two holes and return the end through the upper of the holes (See figure 16). Give the cables a pull so that they grip against the hotbox flanges.

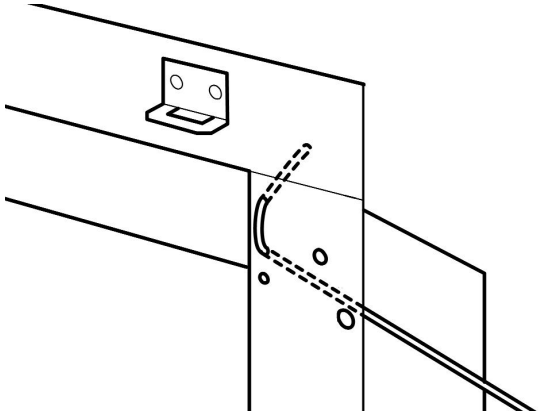


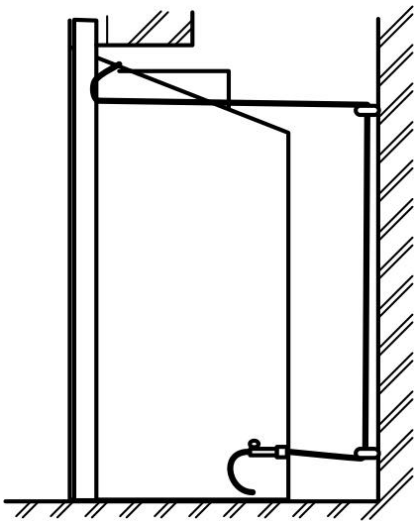
Figure 16. Upper cable retention

6. Thread the cables through the eyebolts. Return the cables through the holes near the bottom of the hotbox back panel (See figure 17) **(For precast or clay block flue systems return the cables through the slotted holes in the side of the hotbox)**.

7. Place the hotbox fully back into the fireplace opening so that it is sealed against the fireplace front surround.

8. Drill a hole into the fireplace floor through each of the two holes in the base of the hotbox using a no.12 masonry drill (See figure 18).

9. Insert a fibre plug into each hole. Use the fibre plugs supplied with this appliance - **Never use plastic plugs instead of the fibre plugs supplied.** Fit a woodscrew in each plug and tighten.



7igure 17. Cable route

Always screw the base into position before applying tension to the cables. This will ensure a tight seal between the top of the hotbox and wall

10. Fit a cable retainer over the bottom end of each cable.

11. Pull each cable taut. Push the cable retainers hard up against the back panel. The end of the cable adjuster will pass into the hole. Tighten the screws in the retainers so that they clamp the cables in position. Apply tension to the cables by turning the hexagonal adjusters by hand (See figure 19).

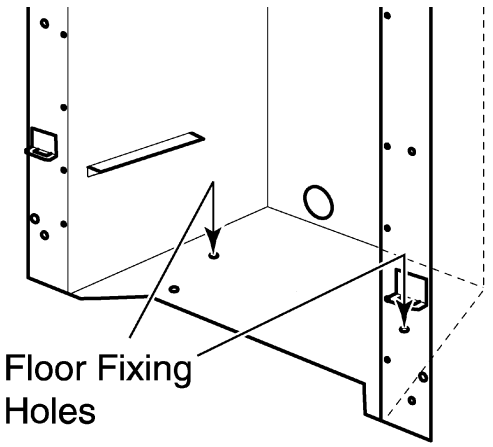


Figure 18. Floor fixing

12. Inspect the installation of the hotbox against the fireplace surround. If the hotbox is aligned squarely and the sealing is satisfactory, fully tighten the cable retainers.

13. If the hotbox is not correctly aligned, release the tension on the cables by slackening the screws and turning the hexagonal adjusters fully anticlockwise. The hotbox should then automatically realign itself. Pull each cable taut again and push the cable retainers back against the back panel. Again, tighten the screws in the retainers and apply tension to the cables by turning the hexagonal adjusters clockwise as far as possible.

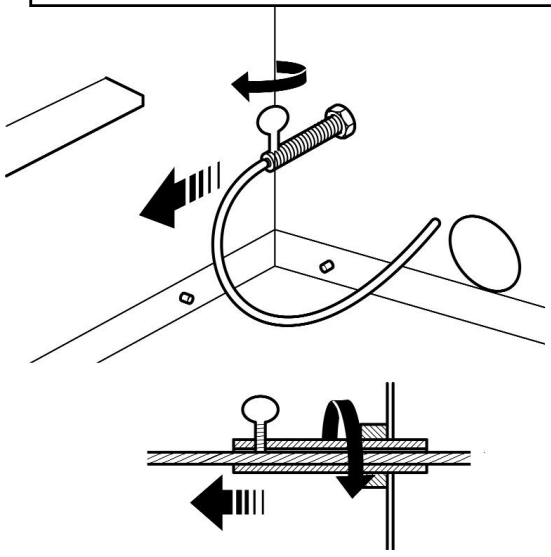


Figure 19. Lower cable retention

14. Feed the free length of the cables into the gap between the inner and outer back panels so that they are available to allow easy removal and refitting of the appliance during subsequent service calls. ***Do not cut off the free lengths of cable.*** On precast flue installations feed the cables into the small holes at the base of the side panels.

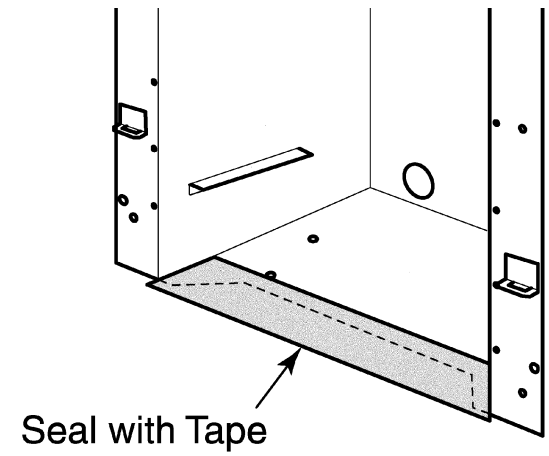


Figure 20. Floor sealing

9.2 Sealing floor front - all installations.
Using the floor sealing tape supplied, seal the bottom of the hotbox to the fireplace and hearth floor (See figure 20).
Make sure that the whole length of the front edge of the hotbox is fully sealed.

10. BURNER & SUPPLY PIPE INSTALLATION

10.1 Fitting the burner.
1. Place the burner module into the hotbox. Secure using the two screws removed previously.

10.2 Supply pipe installation.
A nut and olive is provided for an 8mm-pipe inlet connection directly to the gas control. The isolating ‘T’ connector can be rotated to allow a connection from any direction. The ‘T’ connector includes a valve for isolating the gas supply.
The supply pipe must be rigid material. Flexible pipe must not be used. Connect the supply line to the appliance.
Turn on the gas supply and pressure check the installation pipework for gas soundness. In the United Kingdom (GB) check in accordance with the current edition of BS 6891. In the Republic of Ireland check in accordance with the current edition of IS 813 “Domestic Gas Installations”

10.3 Preliminary burner checks.
Some burner operations can be checked at this stage. Checking now will mean that less disassembly will be required if any problems are found. ***A full check should still be made, however, after final installation.***

10.3.1 **Lighting the fire.**
If closed, open the isolating ‘T’ connector valve. Depress the control knob and rotate it anticlockwise to the pilot ignition position. A ‘click’ will be heard as the integral piezo operates. A spark should be seen between the electrode and pilot tip. Turn the control

knob clockwise to the ‘Off’ position. Repeat this operation until a flame appears at the pilot. There may be a delay before the pilot lights due to air being purged from the system. When a flame appears at the pilot keep the control knob depressed and hold the pilot ignition position for five seconds. When the control knob is released the pilot flame should remain lit.
If there are no sparks check that the electrode lead is connected to the electrode tag.

10.3.2 Operating the burner.

When the pilot burner is operating properly, gradually turn the control knob anti-clockwise to ‘HIGH’ (Depress the knob slightly to get past the pilot ignition position). The main burner should now light. Depress the control knob slightly to release from the ‘HIGH’ position and turn back (clockwise) to ‘LOW’. While turning, the burner flames should gradually become lower but remain alight. Depress the control knob slightly to release from the ‘LOW’ position and turn back (clockwise) to the Pilot ignition position. The main burner should extinguish but the pilot should remain alight. Depress the control knob slightly and turn back (clockwise) to turn OFF.
This will extinguish the pilot.

10.4 Check inlet pressure.

The appliance is pre-set to give the correct heat input at the inlet pressure shown in section 2 of this manual. No adjustment is necessary.
1. Check the inlet pressure by fitting a pressure gauge at the test point. The test point is on the inlet ‘T’ connector (See figure 21). Check the pressure with the appliance alight and set at maximum output.
2. After checking, turn off the appliance. Remove the pressure gauge and replace the test point sealing screw.
3. Relight the appliance. Turn to the maximum output position and test around the sealing screw for gas soundness with a suitable leak detection fluid.

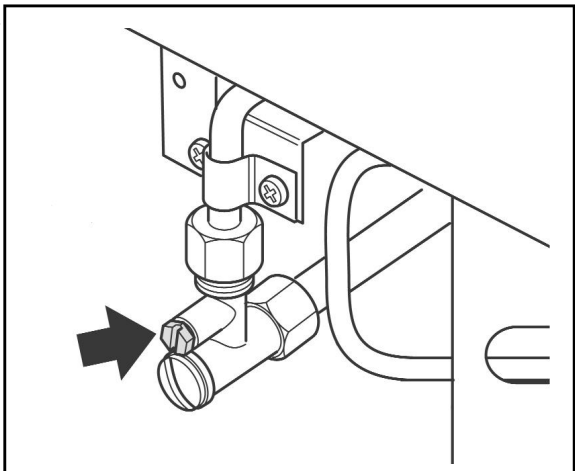


Figure 21. Pressure test point

11. FASCIA INSTALLATION

11.1 Fitting the fascia.

1. Unpack the fascia. Carefully lift the fascia. Place the fascia against the fireplace front surface so that the four retaining plates at the back of the fascia are directly above the four retaining brackets of the hotbox. There are two at the top of the hotbox and two to the side of the burner module. Do not lift the fascia too high as the bottom of the fascia will foul against the control knob. Lower the fascia unit making sure that the retaining plates locate fully into the brackets on the hotbox (See figure 22).

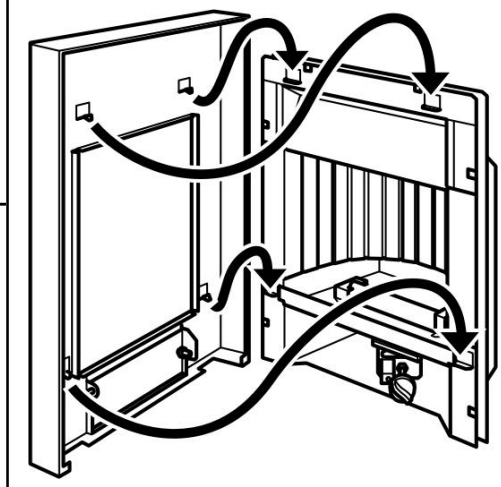


Figure 22. Fascia location

2. Unpack the fascia casting and lower into the hotbox as in figure 23. The side of the casting has slots that locate over the front of the burner unit (See figure 23). At the rear of the casting there is a small shelf. This should locate under the ribbed panel. After locating the casting gently push the front of the casting.

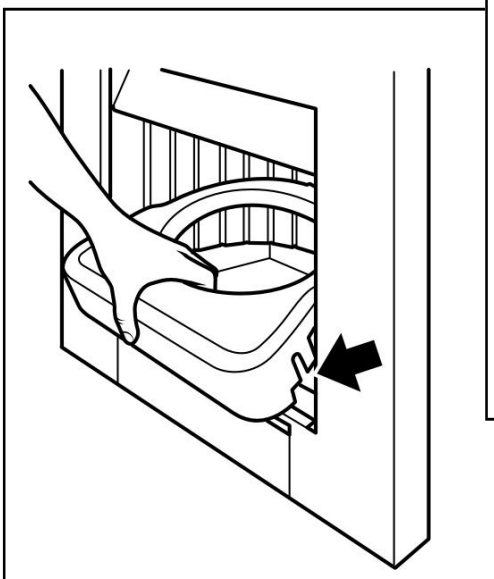


Figure 23. Fascia casting location

12. FITTING THE CERAMIC FUEL EFFECT

The installer and owner guide for the ceramic fuel effect is supplied with the ceramic fuel effect. It is important that the guide for the ceramic fuel effect be placed inside or attached to this guide and handed to the customer following completion of the ‘final review’ section.

13. FULL OPERATING CHECKS

13.1 Check the control settings.

Please note:

When first turned on from cold, the flames will appear predominantly blue.

When operating the fire for the first time, some vapours may be given off which could set off smoke alarms in the vicinity. These vapours are quite normal with new appliances. They are totally harmless and will disappear after a few hours use.

13.1.1 **Lighting the burner.**

Open the isolating valve on the 'T' connector. Screw on the end cap and test for leaks. Depress the control knob and rotate it anticlockwise to the pilot ignition position. A 'click' will be heard as the integral piezo operates. A flame should appear at the pilot to the left hand side of the ceramic fuel effect. When a flame appears at the pilot keep the control knob depressed and hold the pilot ignition position for five seconds. When the control knob is released the pilot flame should remain lit.

If there are no sparks check the spark gap between electrode wire and pilot tip.

13.1.2 **Operating the burner.**

Turn the control knob anti-clockwise to 'HIGH' (Depress the knob slightly to get past the pilot ignition position). The main burner should now light. Depress the control knob slightly to release from the 'HIGH' position and turn back (clockwise) to 'LOW'. While turning, the burner flames should gradually become lower but remain alight. Depress the control knob slightly to release from the 'LOW' position and turn back (clockwise) to the Pilot ignition position. The main burner should extinguish but the pilot should remain alight. Depress the control knob slightly and turn back (clockwise) to turn OFF. This will extinguish the pilot.

13.2 Check for spillage.

A spillage check must be made before leaving the installed appliance with the customer. Make this with all the ceramic fuel effect pieces in position.

1. Close all doors and windows in the room containing the appliance.

2. Light the appliance and set the control to the 'High' position.

3. Leave the appliance on for five minutes.

4. The smoke match should be placed horizontally into the hotbox at the right hand side (See figure 24).

The installation is satisfactory if the smoke is drawn into the appliance.

If the smoke is not drawn into the appliance leave the appliance alight at the maximum setting for a further ten minutes and then repeat the test. If the smoke is still not drawn into the appliance inspect the sealing to the fireplace surround. If the sealing is satisfactory but the appliance is installed with the flue restrictor (See

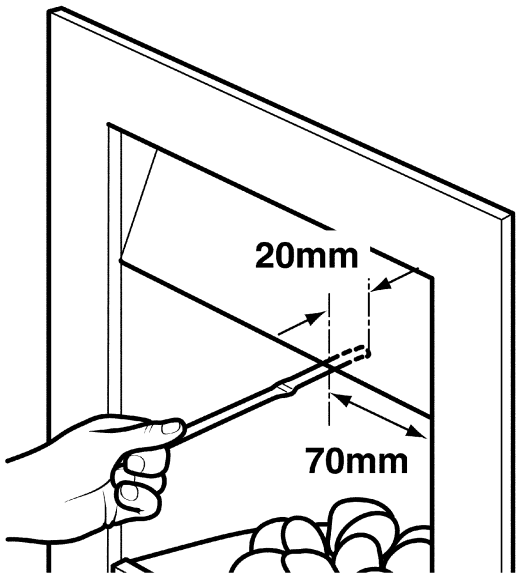


Figure 24. Smoke match tube position (Fascia may differ from that shown)

section 8 point 6) remove the restrictor, reseal the appliance and retest. If smoke is still not drawn into the appliance **disconnect the appliance and seek expert advice.**

5. If the above test is satisfactory open all internal connecting doors, hatches, etc. in the room. Keep all doors and windows that open to the outside of the building closed. Recheck for spillage as above. If an extractor fan is installed in the same room as the appliance or a connecting room, check that spillage does not occur with the fan operating and all doors and other openings between the fan and the appliance open.

If the smoke is drawn into the appliance, continue with the installation. If the test is not satisfactory **disconnect the appliance and advise the customer of the cause of failure.**

13.3 Flame supervision and spillage monitoring system.

This pilot unit includes a system that will automatically shut off the gas supply if the pilot flame goes out or if there is insufficient oxygen due to spillage or poor ventilation. Check that the system operates properly as follows: -

- Light the appliance. Set at the “HIGH” position and leave for one minute.
- Turn back to “OFF” to extinguish the pilot. **Note the time when the pilot goes out.**

Listen for a snap sound at the gas tap. **Note the time when the sound is heard.** This sound is caused by an electromagnetic valve shutting off the gas supply through the tap. The valve is located in the body of the tap. The valve should operate **within 60 seconds of the pilot going out.** If the valve does not operate within this time limit do not allow the appliance to be used until the fault has been corrected.

This monitoring system must not be adjusted, bypassed or put out of operation.

This monitoring system or any of its parts must only be exchanged using Baxi Fires Division authorised parts.

14. FINAL REVIEW

1. Visually inspect the appliance. Clean off any marks incurred during installation. **The fire should be 'off' and allowed to cool completely before cleaning.**

Fascia parts.

- Clean the metal parts with a slightly damp lint free non-abrasive cloth and then dry.
- Do not use abrasive cleaners as these will scratch the fire surface.

2. Advise the customer how to operate the appliance. Point out that lighting instruction details are on the metal plate attached at the bottom of the appliance. Explain to the customer that the appliance has a flame failure & spillage monitoring system. Point out the explanation of this system shown in the owner guide under "Operating the fire". Advise that if the fire goes out for any reason; wait at least three minutes before relighting. Stress that if the monitoring system repeatedly shuts off the fire, the appliance should be switched off and a specialist should be consulted.

3. Advise the customer that they should read their owner guide before operating the fire and always follow the advice in the section headed "Cleaning your fire".

4. **Stress that no extra fuel effect pieces must be added over and above those supplied with the appliance and that any replacements must only be the authorised spares. Warn that ignoring this advice could cause incomplete clearance of the products of combustion with consequent health hazards.**

5. Advise the customer that the appliance will operate to its maximum potential if the flue is primed during the first 20 – 30 minutes of use. To do this, simply turn the control to its 'HIGH' setting. This will also burn off any carbon deposits that may have formed during previous use.

If using the appliance for long periods it is beneficial to change between settings. This will also help to remove any carbon deposits that may form during use.

6. Recommend that the appliance should be serviced by a competent person at least annually.

7. If the appliance is in premises in the United Kingdom occupied by a tenant, point out that by law a landlord must have any gas appliance, flue and pipework which is situated in a tenant's premises checked for safety at least every 12 months.

8. Advise that the fire may give off a slight odour while new. This is quite normal and it will disappear after a short period of use.

9. **Inform the customer that the Serial number for the appliance is located on the data label located behind the lower cover and attached underneath the burner module.**

10. Hand the literature pack with this guide to the customer.

15. SERVICING & PARTS REPLACEMENT

Always turn off the gas supply before commencing any servicing (The appliance inlet "T" connector incorporates an isolating valve).
It is recommended that, at least once a year, the appliance is disconnected and the fireplace opening checked and cleared of any debris.
This product uses fuel effect pieces containing Refractory Ceramic Fibres (RCF), which are man-made vitreous silicate fibres. Excessive exposure to these materials may cause irritation to eyes, skin and respiratory tract. Consequently, it is important to take care when handling these articles to ensure that the release of dust is kept to a minimum. To ensure that the release of fibres from these RCF articles is kept to a minimum, during installation and servicing we recommend that you use a HEPA filtered vacuum to remove any dust and soot accumulated in and around the fire before and after working on the fire. When replacing these articles we recommend that the replaced items are not broken up, but are sealed within a heavy duty polythene bag, clearly labelled as RCF waste. This is not classified as "hazardous waste" and may be disposed of at a tipping site licensed for the disposal of industrial waste. Protective clothing is not required when handling these articles, but we recommend you follow the normal hygiene rules of not smoking, eating or drinking in the work area and always wash your hands before eating or drinking.

- Check that the appliance is clean and that soot or debris is not blocking the gaps between the ceramic fuel effect pieces causing an imperfect flame.
- Check that soot or debris is not impairing the electrode spark or pilot burner.
- Check that soot or debris is not blocking any of the holes in the main burner.
- After servicing, make sure that the ceramic fuel effect pieces are replaced correctly as described in the installation instructions.
- **Always test for gas soundness and spillage after servicing the appliance.**

15.1 To remove the fascia.
1. Remove the ceramic fuel effect.
2. Carefully lift the fascia casting and pull forward to remove (See figure 25).
3. The fascia is held in place by four retaining plates at the back of the fascia. These slot into four retaining brackets on the hotbox. To remove the fascia, hold the sides of the fascia and lift upward and forward. The fascia should lift clear of the hotbox. Do not lift too high before pulling clear as the bottom of the fascia will foul the control knob (See figure 26).
2. Replace in the reverse order

15.2 To remove the burner unit.

1. Remove the fascia as in section 15.1.

2. Remove the two screws to the side of the burner unit.

3. Support the inlet 'T' connector to avoid straining the pipework and disconnect the appliance from the inlet 'T' connector.

4. Detach the burner unit from the hotbox by lifting clear

5. Replace in the reverse order.

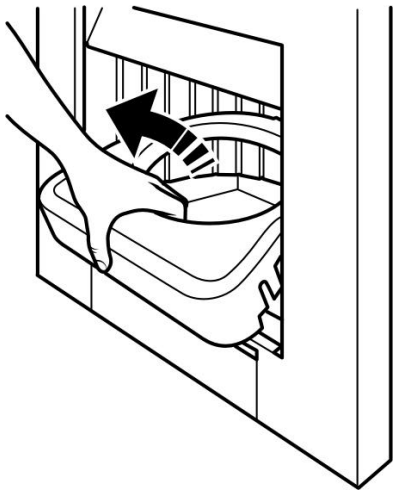


Figure 25. Fascia casting removal

15.3 To remove the pilot unit.

1. Remove the burner unit (See section 15.2).

2. If lying the burner on its back, ensure that the work surface is suitably protected This will avoid damage to the work surface. Detach the pilot pipe from the pilot unit.

3. Detach the thermocouple from the gas valve

4. Detach the electrode lead from the underside of the electrode tab.

6. Remove the two screws securing the pilot unit (See figure 27).

7. Refit in the reverse order.

Note: *1. The pilot unit is an atmosphere sensing device. It must be replaced as a whole assembly. Its individual components are not separately replaceable.*

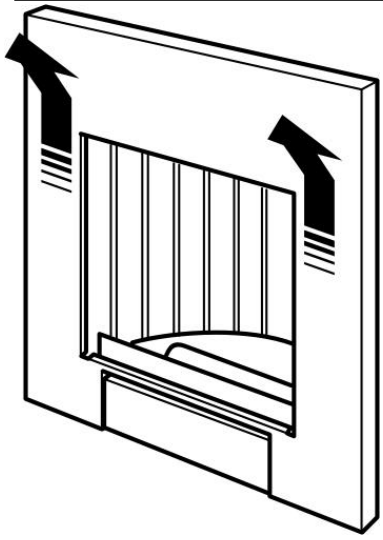


Figure 26. Fascia removal

15.4 To remove the gas valve.

(See figure 28).

1. Remove the burner unit (See section 15.2).

2. If lying the burner on its back, ensure that the work surface is suitably protected. This will avoid damage to the work surface. Turn the burner unit upside down. Detach the thermocouple from the tap

3. Detach the pilot pipe from the tap.

4. Detach the inlet pipe.

5. Detach the injector pipe

6. Detach the electrode lead from the base of the electrode

7. Remove the control knob by pulling forward.

8. Remove the gas valve spindle extension by removing the screw that secures it to the

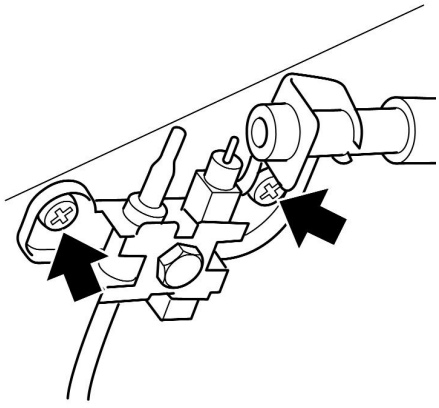


Figure 27. Pilot unit removal

gas valve spindle.
9. Remove the thermocouple by unscrewing the thermocouple nut at the gas valve.
10. Remove the hexagonal nut securing the gas valve to the mounting bracket.
11. Remove the gas valve
12. Refit in the reverse order.

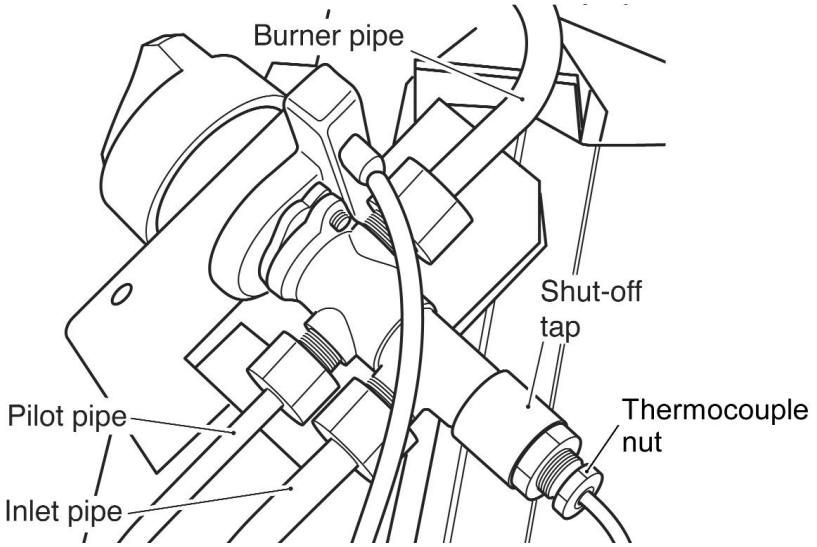


Figure 28. Gas valve (Viewed from rear with burner turned over)

15.5 To remove the piezo generator.
1. Remove the gas valve as section 15.4.
2. Make sure that the tap is in the off position.
3. Remove the circlip holding the piezo unit to the tap. Remove the piezo unit.
4. Replace in the reverse order.

15.6 To grease the control tap.
1. Detach the tap and remove the piezo generator as section 15.5 making sure that the tap is in the 'off' position.
2. Remove the two screws from the head of the tap. Remove the niting head and spindle complete with collar and spring.
3. Note the position of the slot in the plug - mark its position on the tap body.
4. Remove the plug rotating slightly while pulling.
5. Clean and grease the plug lightly with suitable grease. Do not apply excessive grease. Particularly, make sure that the gas ports in the tap are not restricted by grease.
6. Push the plug into the tap body and position the slot in line with the mark previously made on the tap body.
7. Reassemble the niting head and spindle complete with collar and spring making sure that the components are correctly engaged. Check the operation of the tap.
8. Refit the piezo generator.

15.7 To replace the burner.
(See figure 29).
1. Remove the burner unit (See section 15.2).
2. Support the elbow injector and unscrew the injector nut.
3. Remove the two screws from the burner clamping plate (See figure 29)
4. Lift the right hand side of the burner, slide it to the right and lift clear
5. Refit in reverse order.

15.8 To remove the main burner injector.
(See figure 30).
1. Remove the burner (See section 15.7).
2. Remove the burner clamping screw (See figure 30)
3. Unscrew the injector from the burner.
4. Refit in the reverse order.

15.9 To remove the appliance from the fireplace.
1. Remove the burner unit (See section 15.2).
2. Slacken the hexagonal adjusters on the cable retainers and unscrew the thumbscrews to release the cables.
3. Refit as described in the relevant installation sections. Make sure gas soundness, sealing, spillage test and performance are satisfactory.

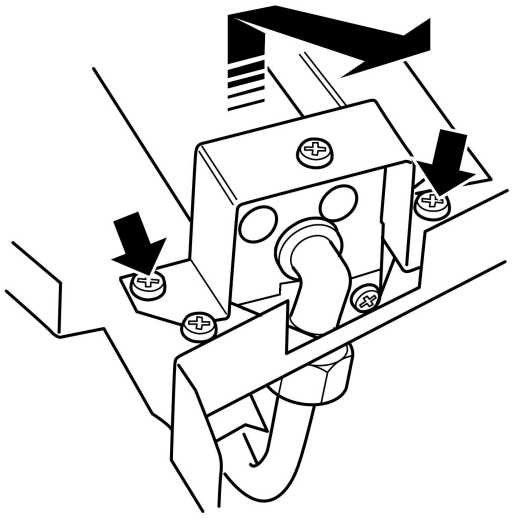


Figure 29. Removal of burner

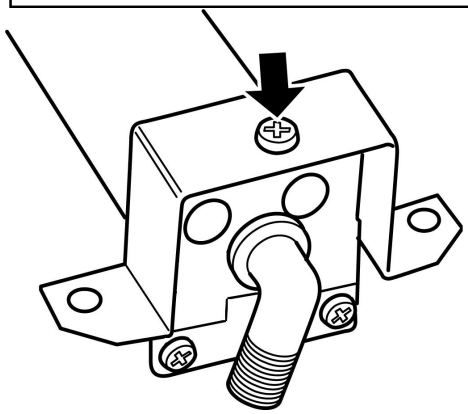


Figure 30. Main burner injector removal